P/2107-264

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Ferdinand Hermann BAHLMANN, *et al.*

Serial No.: 10/522,426

Filed: March 25, 2005

For: USE OF ERYTHROPOIETIN

Confirmation No.: 5804

Group Art Unit: 1654

Examiner: Thomas S. Heard

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. §1.132

Sir:

1. I, Hermann Haller, am a German citizen , residing at An der Trift 8D, 30559 Hannover, Germany. I am a trained Physician and Scientist, working in the field of kidney disease at university level for several years.
2. I am a co-inventor of application Serial No. 10/522,426 and I am familiar with that application. I have reviewed the Office Action from the United States Patent and Trademark Office mailed January 8, 2008 and I understand the rejections set forth therein. In addition, I am familiar with the references cited as a basis for the various grounds of rejection set forth in the Office Action. I am making this declaration in support of the patentability of the claims of application Serial No. 10/522,426.
3. By me, or under my direction and control, a series of experiments was carried out to analyze the effects of erythropoietin, at a variety of dosages, on the healing of skin wounds in mice. The purpose of these experiments, which were carried out at the time the present application was filed, was to demonstrate the criticality of the dosage of erythropoietin used to achieve the wound-healing effect, which is the subject of the method recited in the claims of the present application. A graph illustrating the results obtained over the course of these experiments is provided as an attachment to this declaration.

4. In the course of our experiments, mice were treated by creating a 'standard' wound in their skin with a hole punch, after which various dosages of erythropoietin were administered to the wounded mice and the effect on wound healing was determined. The treatments, as described below, were begun immediately after wounding the animal on the day of the operation. During the course of the treatment with erythropoietin, the recombinant human erythropoietin (Aranesp) was administered subcutaneously once per week. Each group of treated animals comprised five (5) individuals.

5. As shown in the attached graph, a low-dose erythropoietin treatment, i..e., in accordance with the presently claimed mode of treatment (utilizing a dosage of 0.1 μg Aranesp/kg/week, 20 IU/kg/week), led to a complete closing of the wound after 7-8 days. A control group, treated only with physiological saline solution, showed wound closing after 13 days.

6. In contrast to the results achieved the relatively 'low-dosage' treatment with erythropoietin according to the presently claimed method as described in the paragraph above, treatment of the mice with correspondingly 'high' doses of erythropoietin, i.e., involving a dosage in accordance with the teaching found in the prior art cited to reject the present claims (1.0 μg Aranesp/kg/week, 200 IU/kg/week), did not demonstrate any acceleration of wound healing in comparison to treatment at the claimed levels, or even in comparison to treatments with the physiological saline control solution. In fact, in two of the animals, treatment with such, 'prior art' levels of erythropoietin resulted in the death of the animals.

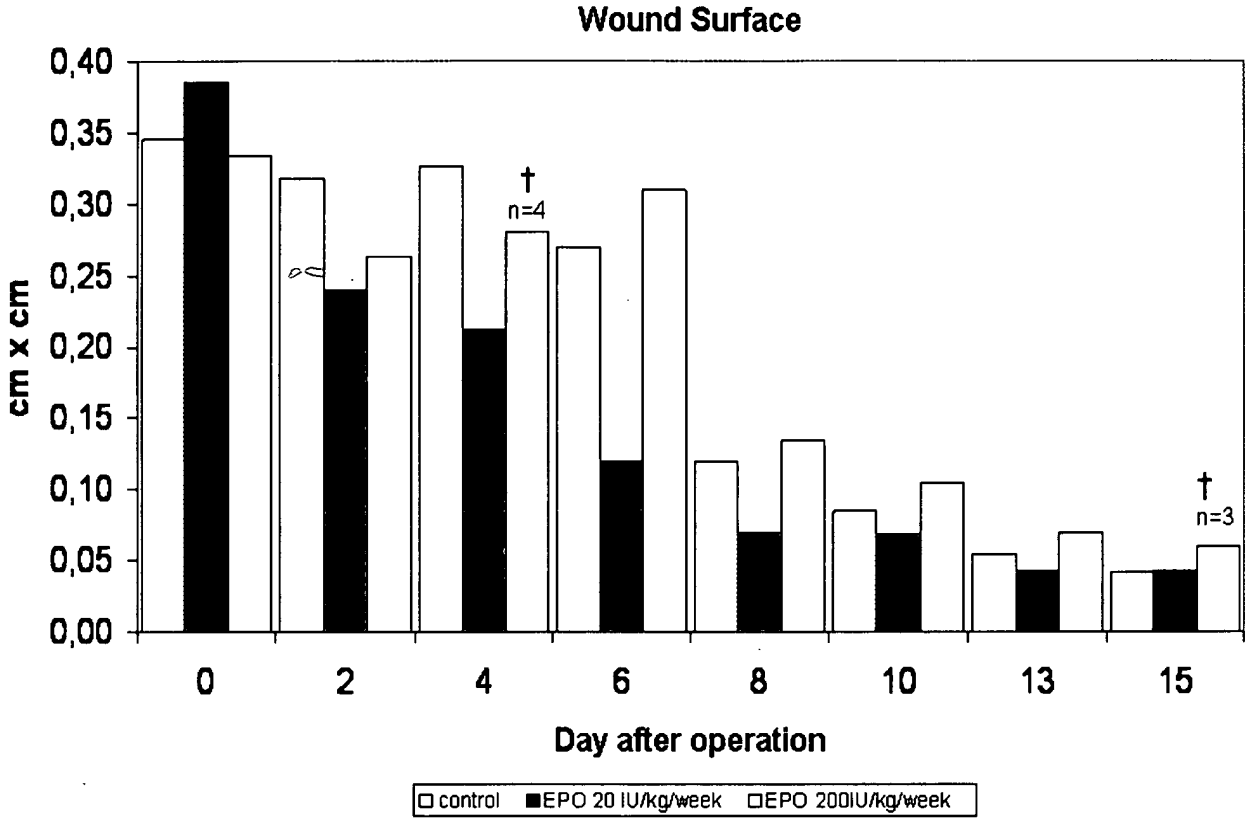
7. In my view, the data discussed above and presented on the attached graph provides clear evidence of the criticality of the claimed dosage levels for erythropoietin, i.e., as compared to the significantly higher levels taught for use by the prior art relied upon by the Patent Examiner to reject the claims of the present application.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false

statements are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 2/5/08

By: _____
Hermann Haller


Wound Surface
0,40
0,35
0,30
0,25
0,20
0,15
0,10
0,05
0,00
cm x cm
†
n=4
†
n=3
0
2
4
6
8
10
13
15
Day after operation
control
EPO 20 IU/kg/week
EPO 200IU/kg/week